

ADDENDUM TO THE FACT SHEET
FOR NATIONAL POLLUTANT DISCHARGE
ELIMINATION SYSTEM (NPDES)
PERMIT NO. WA0042099

I. GENERAL INFORMATION

Facility: Grand Mound Wastewater Treatment Plant
20248 Grand Mound Way
Grand Mound, WA 98531

II. APPLICATION REVIEW

Thurston County Public Works submitted an application to Ecology on May 1, 2009, and July 30, 2009, for permit reissuance, and Ecology accepted it on August 17, 2009. Ecology has sufficiently reviewed the application, discharge monitoring reports, and other facility information in enough detail to ensure that:

- Thurston County Public Works has complied with all of the terms, conditions, requirements and schedules of compliance of the expired permit.
- Ecology has up-to date information on the waste treatment practices and the nature, content, volume, and frequency of its discharge.
- The discharge meets applicable effluent standards and limits, water quality standards, and other legally applicable requirements.

III. PERMIT REAUTHORIZATION

When Ecology reauthorizes a discharge permit it essentially reissues the permit with the existing limits, terms and conditions. Alternatively, when Ecology renews a permit it re-evaluates the impact of the discharge on the receiving water which may lead to changes in the limits, terms and conditions of the permit.

This fact sheet addendum accompanies the permit, which Ecology proposes to reauthorize for the discharge of wastewater to the Chehalis River. The previous fact sheet explains the basis for the discharge limitations and conditions of the reauthorized permit and remains as part of the administrative record.

The primary change at the plant since 2003 came with the opening of the Great Wolfe Lodge in March 2008. Flows from the lodge have increased loadings to the treatment plant, but lodge discharges have been problematic at times. For example, the Lodge has discharged large volumes of relatively clean water during pool cleaning. The County and the Lodge are discussing protocols to ensure lodge discharges do not impact the plant.

Ecology determined it does not need to change the existing permit requirements, including discharge limits and monitoring, to protect the receiving water receiving

quality. The previous fact sheet addressed conditions and issues at the facility at the time when Ecology issued the previous permit in 2003. Since the issuance of the current permit, Ecology has not received any additional information which indicates that environmental impacts from the discharge warrant a complete renewal of the permit. The reauthorized permit is virtually identical to the previous permit issued on December 12, 2003.

As part of this permit reauthorization, we examined the potential for this discharge to violate water quality standards for temperature in the Chehalis River. The data used in the analysis include: effluent grab sample data from the Permittee collected in the previous permit cycle and River temperature data from the Ecology station 23A100 (Chehalis River @ Prather Road upstream of the Grand Mound Wastewater Treatment Plant outfall) that collects monthly grab water quality samples. Ecology determined that the discharge may have the potential to violate temperature standards in the receiving water. As a result, Ecology is continuing to require monitoring for temperature (see Appendix A for Temperature Analysis).

Ecology reviewed inspections and assessed compliance of the Thurston County Public Works discharge with the terms and conditions in the previous permit and determined that it should not rank the facility as a high priority for permit renewal. Ecology assigns a high priority for permit renewals in situations where water quality would benefit from a more stringent permit during the next five-year cycle.

The permit reauthorization process, along with the renewal of high priority permits, allows Ecology to reissue permits in a timely manner and minimize the number of active permits that have passed their expiration dates. For permit reissuance planning purposes, Ecology follows a system of ranking that considers the benefit gained by renewing a permit rather than reauthorizing a permit during its annual permit planning process. Ecology assesses each permit that is expiring and due for reissuance and compares it with other permits due for reissuance. Ecology notifies the public and seeks input after it has tentatively established the initial draft ranking of the permits it plans to renew and those it plans to reauthorize. Ecology considers all relevant comments and suggestions before it makes a final decision.

Ecology carried over the discharge limits and conditions in effect at the time of expiration of the previous permit to this reauthorized permit. Ecology only changed the submittal dates for reports from those in the previous permit. Ecology removed the completed report requirements that do not require additional or continued assessment. It adjusted the dates for the other standard compliance and submittal requirements that it carried over from the past permit into this reauthorized permit. Ecology considered these reports necessary in the previous permit and no information has come forward to cause it to reconsider.

Ecology must public notice the availability of the draft reauthorized permit at least 30 days before it reissues the permit [Washington Administrative Code (WAC) 173-220-

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050]. Ecology invites you to review and comment on its decision to reauthorize the permit (see Appendix B-Public Involvement for more detail on the Public Notice procedures).

After the public comment period has closed, Ecology will prepare a response to comments document that it will attach to this fact sheet addendum. The response to comments will include the resultant changes to the permit and either address each comment individually or summarize the substantive comments and respond. Ecology sends a copy of the response to comments to all parties who submitted comments. Ecology will include the response to comments in this fact sheet addendum.

IV. RECOMMENDATION FOR PERMIT ISSUANCE

Ecology proposes to reissue this permit for five years.

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APPENDIX A—TEMPERATURE ANALYSIS

T-MIX FRESH 8-30-08 a spreadsheet for calculating reasonable potential and limits for temperature

T-MixFresh is based on WAC 173-201A-200(1)(c)(i)–(ii) and Water Quality Program Guidance.

Developed by Eric Schlorff and Laura Fricke (2008)

All Data inputs must meet WQ guidelines.

The Water Quality temperature guidance document may be found at:

<http://www.ecy.wa.gov/biblio/0610100.html>

Notes: Grand Mound WWTP Temperature Analysis

INPUT	Spawning & Rearing Criteria	Supplemental Criteria
	May 16 - Sep 30	Oct 1- May 15
1. Chronic Dilution Factor at Mixing Zone Boundary	22.0	22.0
2. 7DADMax Ambient Temperature (T) (Upstream Background 90th percentile)*	18.5 °C	13.5 °C
3. 7DADMax Effluent Temperature (95th percentile)	24.0 °C	21.0 °C
4. Aquatic Life Temperature WQ Criterion in Fresh Water	17.5 °C	13.0 °C
OUTPUT		
5. Temperature at Chronic Mixing Zone Boundary:	18.8 °C	13.8 °C
6. Incremental Temperature Increase or decrease:	0.3 °C	0.3 °C
7. Incremental Temperature Increase $28/(T+7)$ if $T \leq$ criteria:	---	---
8. Maximum Allowable Temperature at Mixing Zone Boundary:	18.8 °C	13.8 °C
A. If ambient temp is warmer than WQ criterion		
9. Does temp fall within this warmer temp range?	YES	YES
10. Temp increase allowed at mixing zone boundary, if required:	NO LIMIT	0.3
B. If ambient temp is cooler than WQ criterion but within $28/(T_{amb}+7)$ and within 0.3 °C of the criterion		
11. Does temp fall within this incremental temp. range?	---	---
12. Temp increase allowed at mixing zone boundary, if required:	---	---
C. If ambient temp is cooler than (WQ criterion-0.3) but within $28/(T_{amb}+7)$ of the criterion		
13. Does temp fall within this Incremental temp. range?	---	---
14. Temp increase allowed at mixing zone boundary, if required:	---	---
D. If ambient temp is cooler than (WQ criterion - $28/(T_{amb}+7)$)		
15. Does temp fall within this Incremental temp. range?	---	---
16. Temp increase allowed at mixing zone boundary, if required:	---	---
17. Do any of the above cells show a temp increase?	NO	YES
18. Temperature Limit if Required?	NO LIMIT	19.3 °C

* Data from Ecology station 23A100 - Chehalis R @ Prather Rd: Ambient temperature is not the highest background temperature but the temperature when critical condition is likely to happen (when background is cooler and incremental rise is maximum that may exceed the incremental increase limit)

APPENDIX B--PUBLIC INVOLVEMENT INFORMATION

Ecology proposes to reissue a permit to Thurston County Public Works. The permit includes wastewater discharge limits and other conditions. This fact sheet addendum describes the facility and Ecology's reasons for reauthorizing the permit conditions.

Ecology placed a Public Notice of Application on June 4, 2009, and June 12, 2009, in the *Olympia* to inform the public about the submitted application and to invite comment on the reissuance of this permit.

Ecology will place a Public Notice of Draft on _____, in the *Olympian* to inform the public and to invite comment on the proposed draft National Pollutant Discharge Elimination System permit and fact sheet addendum.

The Notice –

- Tells where copies of the draft Permit and Fact Sheet are available for public evaluation (a local public library, the closest Regional or Field Office, posted on our website.).
- Offers to provide the documents in an alternate format to accommodate special needs.
- Urges people to submit their comments, in writing, before the end of the Comment Period
- Tells how to request a public hearing of comments about the proposed NPDES Permit.
- Explains the next step(s) in the permitting process.

Ecology has published a document entitled **Frequently Asked Questions about Effective Public Commenting** which is available on our website at <http://www.ecy.wa.gov/biblio/0307023.html>.

You may obtain further information from Ecology by telephone, 360-407-6279, or by writing to the permit writer at the address listed below.

Water Quality Permit Coordinator
Department of Ecology
Southwest Regional Office
P.O. Box 47775
Olympia, WA 98504-7775

The primary author of this permit and fact sheet is Carey Cholski.